INVESTIGATING THE EFFECTS OF DETECTOR-AVERAGED SRFS
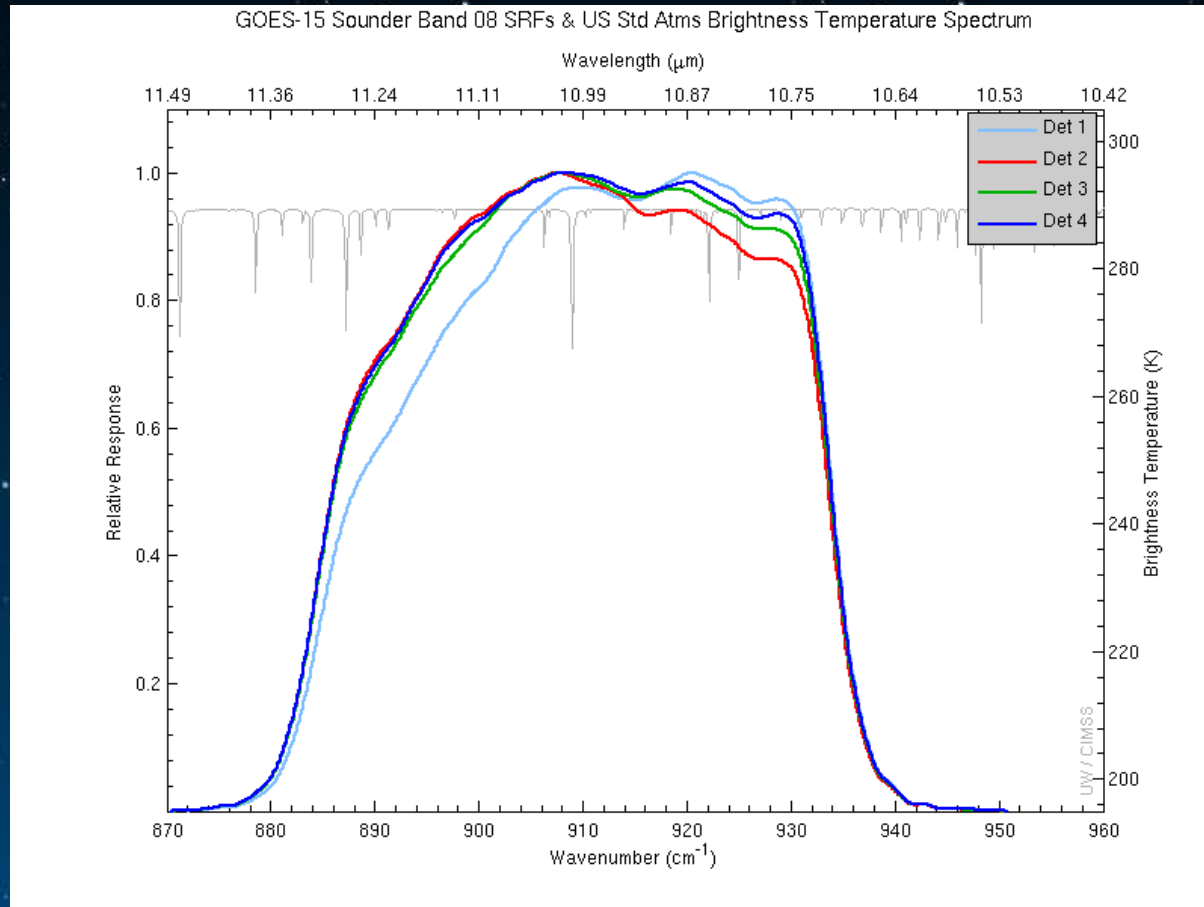
Mat Gunshor
CIMSS / SSEC / UW-Madison
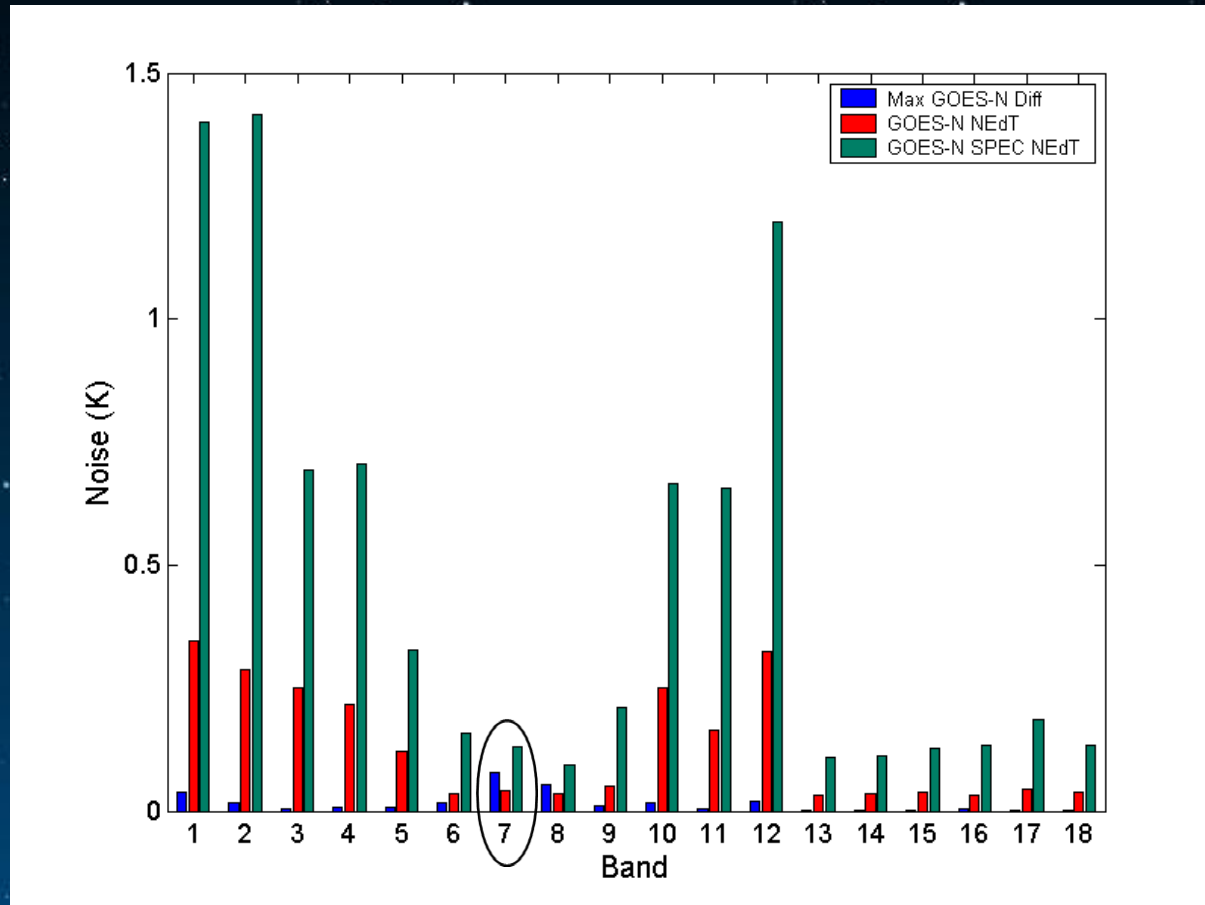
Tim Schmit
NOAA/NESDIS/STAR/ASPB

CIMSS

Project Description

- ABI will have hundreds(?) of detectors that are averaged into one SRF
- Goal: Determine effects of using detector-averaged SRFs on today's GOES imagery and products.
  - Current Sounder has 4 detectors per band
  - Use RTM and convolution with multiple atmosphere types.

Example of SRF detector variability, current GOES-15 Sounder

Detector Level Differences Compared to Noise (GOES-13, prelaunch data)

Note for bands 7 and 8 the max detector-to-detector difference is greater than the noise.